



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBE105-31501W6-PO

Job Sheet 185063



Part No: RBE105-31501W6-PO

Job Qty: 1 ea

Part Name: Puller



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/22/18

Job Tracking No:

Due Date: 11/16/18

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBE105-31501W6 Rev.1 IPP Rev. A 18.10.22 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	1 pcs		11/16/18	0.00	0.00	Purchasing		DEC 12 2018
110	Packaging	1 pcs		11/16/18	0.00	0.00	Packaging2		DEC 12 2018
120	QC	1 pcs		11/16/18	0.00	0.00	QC6		38
130	Packaging	1 pcs		11/16/18	0.00	0.00	Packaging3		9-89
140	QC21-FG	1 Ea		11/16/18	0.00	0.00	QC21		DEC 12 2018

Part Op 100 - Issue P/O: _____ MANUFACTURE RBE105-31501W6 AS PER DWG Supplier: METEC Certificate of Descriptions: conformity is required

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBE105-31501W6P	Puller	1 (1 ea)	100-Purchasing	S137056

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBE105-31501W6P	1	0	0

Part Specifications

Specifications could not be found.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Plex 10/22/18 12:52 PM dart.Lussier.Patrick

Container No: S137057



Part: RBE105-31501W6

Job No: 185063

Serial No/Batch: S137057

Revision: 1

Inspector:

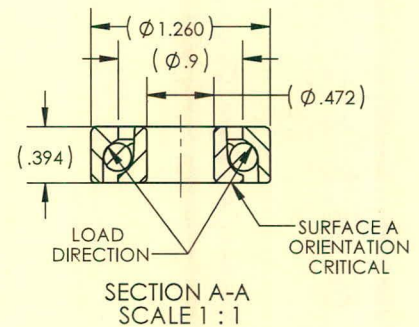
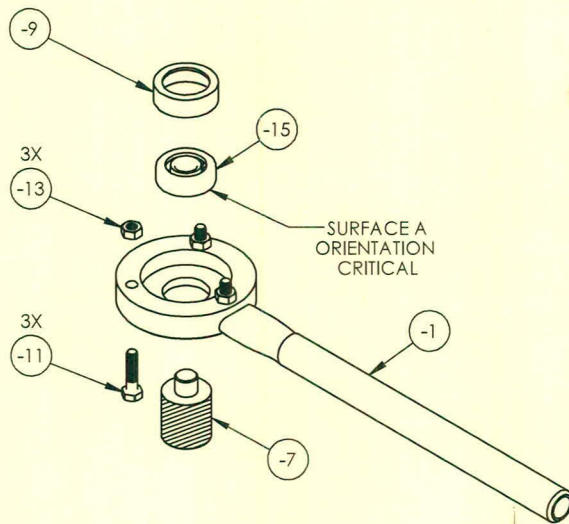
Exp Date:

Instructions:

Date: 12/12/18

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
1		RELEASED FOR PRODUCTION.	2/8/2016	SM JAG



NOTE:
REF. EUROCOPTER T/N: 105-31501W6.

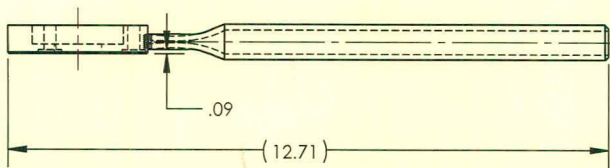
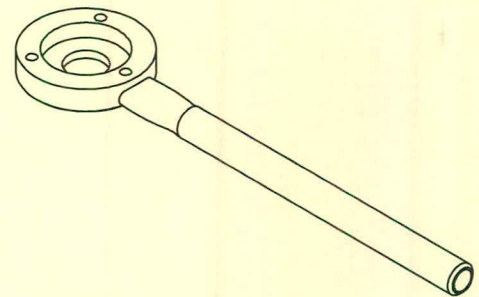
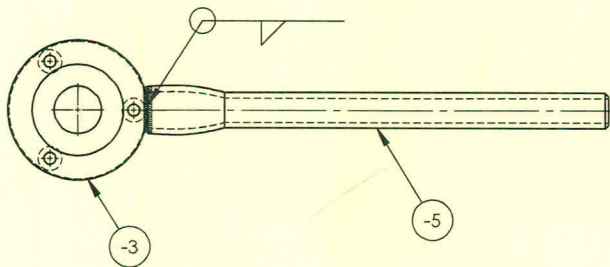
DART
AEROSPACE

TITLE		PULLER	
DWG NO.	RBE105-31501W6		REV 1
MAT'L	UNLESS OTHERWISE SPECIFIED		
HEAT TREAT	DIMENSIONS ARE IN INCHES		
FINISH	FRACTIONS ± 1/8		
SPEC	.XXX ± .005		
	.XX ± .01		
	.X ± .1		
	ANGLES ± 5°		
	SURFACES = 125		
DRAWN BY:	GILBERT		
CHECKED:	MACKOVJAK		
OPPS APPR:	ANDERSON		
QA APPR:	LINDSAY		
APPROVED:	D Weil		
SCALE	1:3	DATE	6/6/2013
			SHEET 1 OF 6

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	X		-1	1	WRENCH WELDMENT			2
	1		-3		RING	4140	Ø3 X 3/4	3
	1		-5		TUBE	1018	Ø3/4 X .12 WALL X 10	4
			-7	1	THREADED PLUG	SP	Ø1-1/4 X 1-3/8	5
			-9	1	CAP	ALUMINUM-BRONZE	Ø1-3/8 X 5/8	6
		B/O	-11	3	SCREW	STEEL	M6 x 1 X 25 MCMaster-CARR #91310A334	1
		B/O	-13	3	NUT	STEEL	M6 x 1 MCMaster-CARR #92497A350	1
		B/O	-15	1	ANGULAR CONTACT BEARING		Ø12mm I.D X 32mm O.D X 10mm SKF #7201-SKF	1
ASSY	-1							

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



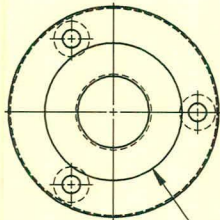
(-1)

WRENCH WELDMENT

DART AEROSPACE	
TITLE PULLER	
DWG NO.	RBE105-31501W6-1
REV	1
MAT'L	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES
CHECKED:	.015 x 45° OR .015R
OPPS APPR:	2. DIMENSIONAL LIMITS APPLY
	AFTER PLATING
QA APPR:	3. INTERPRET DIM AND TOL PER
	ASME Y14.6M-2003
APPROVED: D Weil	USED ON MODEL
	EC 145
SCALE 1:3	DATE 6/6/2013
	SHEET 2 OF 6

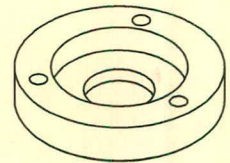
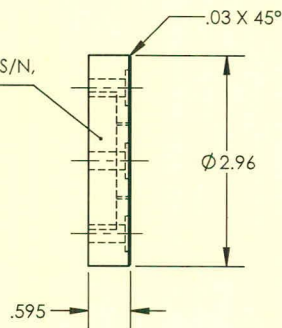
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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



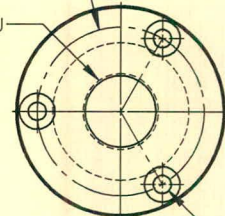
$\varnothing 1.93 \pm .295$

ENGRAVE T/N, S/N,
"MADE IN USA"



$\varnothing 2.359$ B.C.

M27x1.5 THRU



3X $\varnothing .252$ THRU ALL
 $\varnothing .50 \pm .08$
 EQUALLY SPACED

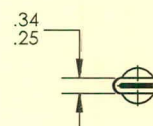
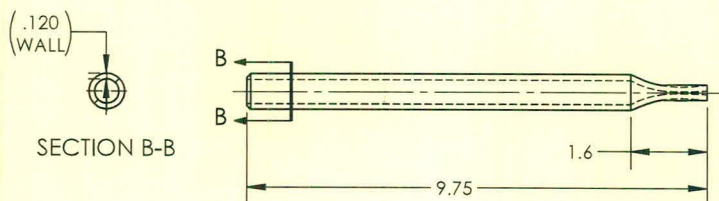
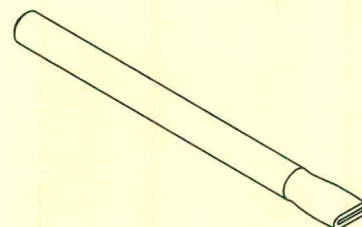
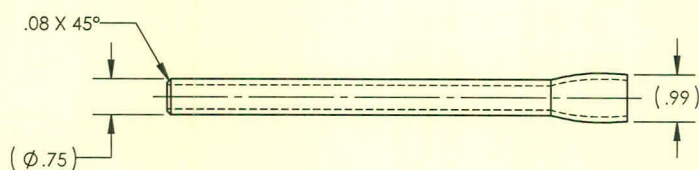
(-3)

RING

DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE105-31501W6-3	REV 1
MAT'L 4140 HEAT TREAT FINISH SEE -1 WELDMENT SPEC DRAWN BY: GILBERT CHECKED: OPSS APPR: QA APPR: APPROVED: D Weil SCALE 1:2	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .008 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125 ✓ 1. BREAK ALL SHARP EDGES .016 X 45° OR .016R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL EC 145 DATE 6/6/2013 SHEET 3 OF 6	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED

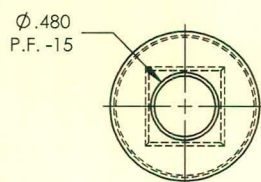
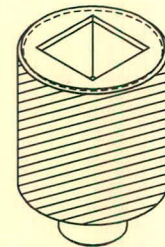
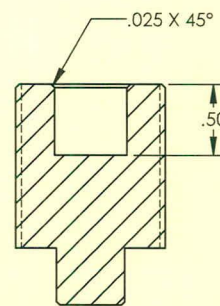
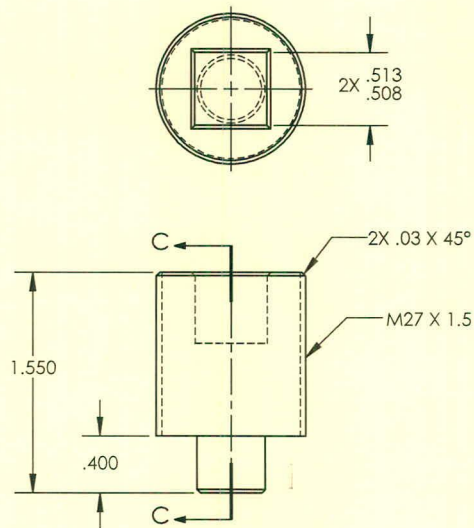


(-5)
TUBE

DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE105-31501W6-5	REV 1
MAT'L 1018	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES
CHECKED:	.015 X 45° OR .015R
OPPS APPR:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: D Weil	USED ON MODEL
SCALE 1:3	EC 145
DATE 6/6/2013	SHEET 4 OF 6

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL

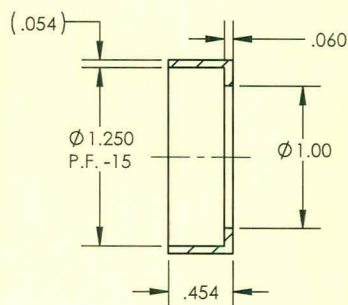
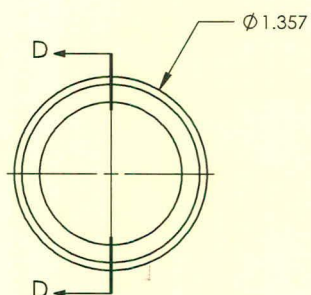
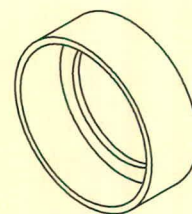


(-7)
THREADED PLUG

DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE105-31501W6-7	REV 1
MAT'L SP HEAT	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TREAT FINISH	.XXX ± .005 FRACTIONS ± 1/8
SPEC QQ-P-416F, TYPE II, CLASS II	.XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 ± .005 OR .015R
CHECKED:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR:	USED ON MODEL
APPROVED: D Weil	EC 145
SCALE 1:1	DATE 6/6/2013
SHEET 5 OF 6	

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL



SECTION D-D



CAP

DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE105-31501W6-9	REV 1
MAT'L ALUMINUM-BRONZE	UNLESS OTHERWISE SPECIFIED
HEAT	DIMENSIONS ARE IN INCHES
TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH	.XX ± .01 ANGLES ± 5°
SPEC	.X ± .1 SURFACES = 125
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES
CHECKED:	.015 x 45° OR .016R
OPPS APPR:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: D Weil	USED ON MODEL
SCALE 1:1	EC 145
DATE 7/19/2013	SHEET 6 OF 6



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041411**

Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO041411
PO Date: 10/22/18
Due Date: 12/14/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Lussier, PatrickPhone:

Via: Ground
Pymt Terms: Net 60

Freight Terms:
Special Comments:

Revised

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	185055	RBE105-14101W2P			Outer Needle Bearings Extractor	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$4,100.00/Ea	\$4,100.00
Line Item Note REV 1													
2	185058	RBE105-14101W18P			Pressing-In Tool	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$1,950.00/Ea	\$1,950.00
Line Item Note REV 1													
3	185059	RBE105-45045W1P			Trammel	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$4,900.00/Ea	\$4,900.00
Line Item Note REV 1													
4	185061	RBE105W27P			Main Gear Box Hoisting Device	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$0.01/Ea	\$0.01
Line Item Note REV 1													
5	185063	RBE105-31501W6P			Puller	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$820.00/Ea	\$820.00
Line Item Note REV 1													
6	185064	RBE105-31702W24P			Tail Rotor Fork Shaft Check	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$0.01/Ea	\$0.01
Line Item Note REV 1													
7	185065	RBE105-13101W3P			Disassembly / Assembly - Rotating Control Rod	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$5,050.00/Ea	\$5,050.00

DAS
38
9-89



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041411**

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
8	185106	RBE105-14101W12-1P			Mounting Shaft Assembly	Firmed	-	12/14/18 DEC 12 2018	1 Ea	0 Ea	1 Ea	\$520.00/Ea	\$520.00
Line Item Note Sub assy on part # RBE105-14101W12 REV 1													
9	185107	RBE105-14101W12-9P			Mounting Base	Firmed	-	12/14/18 DEC 12 2018	1 Ea	0 Ea	1 Ea	\$520.00/Ea	\$520.00
Line Item Note Sub assy on part # RBE105-14101W12 REV 1													
Grand Total:												\$17,860.02	

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

- A005 RIGHT OF ENTRY
- A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
- A012 CHEMICAL AND PHYSICAL TEST REPORTS
- A016 PERSONNEL QUALIFICATION
- A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
- A026 CERTIFICATION OF MATERIAL CONFORMANCE
- A041 QUALITY MANAGEMENT SYSTEM
- A042 DART NOTIFICATION BY SUPPLIER
- A043 RETENTION OF QUALITY DOCUMENT
- A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
- A049 SUPPLIER AWARENESS

Plex 12/11/18 9:11 AM dart.Lussier.Patrick

Packing List

Bill Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Ship Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Shipment No: 24364
Shipment Date: 10-Dec-2018
Ship Via: our truck
Order Number: 3112
Order Date: 10/24/18

Customer Code: DART
Phone: (613) 632-9577
PO Number: PO041411 ✓
Terms: Net 60 Days

Quantity								Job
Item	Open	Shipped	B/O	Canceled	Unit	Description	Revision	Number
1	1	1 ✓	0	0	EA	DART-RBE105-14101W2P Extractor for Outer Needle Bearing	1	3112-01
2	1	1 ✓	0	0	EA	DART-RBE105-14101W18P Pressing - In Tool	1	3112-02
3	1	1 ✓	0	0	EA	DART-RBE105-45045W1P Trammel	1	3112-03
5	1	1 ✓	0	0	EA	DART-RBE105-31501W6P Puller	1	3112-05
7	1	1 ✓	0	0	EA	DART-RBE105-13101W3P Pitch Link Tool	1	3112-07
8	1	1 ✓	0	0	EA	DART-RBE105-14101W12-1P MOUNTING SHAFT ASSEMBLY	1	3112-08
9	1	1 ✓	0	0	EA	DART-RBE105-14101W12-9P MOUNTING BASE	1	3112-09

DAS
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9-89

The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.

Received In Good Order By

Page 1 of 1



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	Dwg Rev#	P.O. Number
1 /	RBE105-14101W2P ✓	Outer Needle Bearings Extractor	1	PO041411 /
1 /	RBE105-14101W18P ✓	Pressing-In Tool	1	PO041411 /
1 /	RBE105-45045W1P ✓	Trammel	1	PO041411 /
1 /	RBE105-31501W6P ✓	Puller	1	PO041411 /
1 /	RBE105-13101W3P ✓	Pitch Link Tool	-	PO041411 /
1 /	RBE105-14101W12-1P ✓	Mounting Shaft	1	PO041411 /
1 /	RBE105-14101W12-9P ✓	Mounting Base	1	PO041411 /

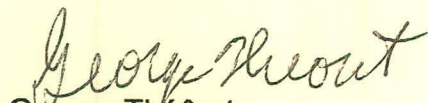
DAS
38
9-89

No deviations for these part

Material supplied by METEC

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.


George Théoret

Vankleek Hill, December 10, 2018

